

Amendments to the Claims:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

Listing of Claims:

1. (Currently Amended) A device for determining a boiling point of a [[hydraulic]] fluid [[of a hydraulic system]], comprising:

an electrical heating element situated in the fluid, the electrical heating element acting as an actuator of a micropump and being situated in a fluid-chamber thereof, wherein, according to a thin film technique, the heating element is applied to a substrate which is provided with a cover to form [[a]] the chamber; and

a current measuring unit to infer an instantaneous electrical resistance of the heating element.

2. (Original) The device according to claim 1, wherein the device is for determining a boiling point of a brake fluid of a braking system in a motor vehicle.

3. (Canceled)

4. (Currently Amended) The device according to claim [[3]] 1, wherein the chamber has an inlet and an outlet which are situated in one of the substrate and the cover.

5. (Currently Amended) The device according to claim [[3]] 1, wherein the substrate is composed of at least one of a semiconductor, heat-resistant glass, a ceramic and plastic, and the cover is composed of at least one of a semiconductor, heat-resistant glass, a ceramic and plastic.

6. (Original) The device according to claim 5, wherein the substrate is composed of silicon.

7. (Original) The device according to claim 5, wherein the cover is composed of silicon.

8. (Original) The device according to claim 1, wherein the heating element is produced from one of aluminum and platinum, and is coated by a dielectric.

9. (Original) The device according to claim 1, further comprising a PTC resistor element situated in the chamber.

10. (Original) The device according to claim 1, wherein the device has a multilayer construction.

11. (Currently Amended) A method for determining a boiling point of a fluid [[of a hydraulic system]] using a device having a heating element, applied to a substrate in a fluid-chamber, the method comprising:

conveying the fluid into [[a]] the chamber of a micropump with the aid of the heating element;

heating the fluid to boiling using the heating element;

determining an electrical resistance of the heating element by measuring an instantaneous electrical current at the heating element; and

thereafter ascertaining the boiling point of the fluid with the aid of the electrical resistance of the heating element and its known [[at least one of a temperature characteristic and a resistance characteristic of the heating element]] temperature/resistance characteristics.

12. (Original) The method according to claim 11, wherein after an abrupt change in the electrical resistance of the heating element, a heating performance of the heating element is lowered.

13. (Original) The method according to claim 11, further comprising operating the heating element in a pulsed manner at regular intervals.